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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/539,394	03/31/2000	James Paul McCarthy	199-1452	9656

7590 05/06/2002

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EXAMINER
AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
3618	

DATE MAILED: 05/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/539,394	McCarthy, James Paul
Examiner	**Art Unit**
Bridget Avery	3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Feb 12, 2002* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujisawa et al. (US Patent 6,175,785).

Fujisawa et al. discloses a hybrid vehicle drive system including a generator (5) operatively connected to the engine (1) to produce a reaction torque, effective to control a first speed; a clutch (2) assembly selectively coupled to the generator (5) to selectively augment the reaction torque, thereby cooperating with the generator (5) to control the first speed; and a controller (10) which is coupled to the generator (5), engine (1), and to the clutch assembly (2), the controller (10) being effective to determine the amount of reaction torque required to control the first speed,

based upon the amount of reaction torque, to cause the generator (5) and clutch assembly (2) to cooperatively provide the reaction torque. See column 1, lines 36-40 and column 2, lines 36-51.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa et al. ('785) in view of Sumi (US Patent 6,054,776).

Fujisawa et al. discloses the feature described above.

Fujisawa et al. is silent regarding the type of clutch used and fails to show a valve assembly.

Sumi discloses a hybrid electric vehicle including an engine (1) having an output shaft; a motor/generator (2) coupled, by a planetary gear set (35), to the engine (1) which produces a reaction torque; a controller; and, a clutch assembly (36) coupled to the generator (2); the clutch (36) is coupled to a source of pressurized fluid by an actuatable valve assembly (36a) and the controller is effective to actuate the valve assembly.

Based on the teachings of Sumi, it would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention to modify the system of Fujisawa et al. to include a clutch assembly coupled to a source of pressurized fluid and a valve assembly to provide a conventional hydraulically operated clutch assembly. With respect to claim 5, the provision of a planetary gear set coupling a generator to an engine is conventional in the art and would have been obvious to one having ordinary skill in the art. With respect to claim 8, motor/generators are conventionally designed to include a stator and rotor assembly. With respect to claims 14-19, the method for controlling the speed of an engine, which includes selectively activating the generator to produce a negative torque and selectively and frictionally engaging a rotor assembly to lower the speed of the engine is obvious in view of Fujisawa et al. and Sumi.

Response to Arguments

5. Applicant's arguments filed February 12, 2002 have been fully considered but they are not persuasive. Contrary to applicant's remarks, the clutch of Fujisawa et al. is connected to the generator as evident by the disclosure at column 5, lines 37-40. Fujisawa et al. clearly describes the relationship between the clutch and the generator and the way in which the speed of the motor and engine affect the clutch which then has an effect on the generator torque and motor torque. Contrary to applicant's remark that "generator 5 is the only means employed by Fujisawa to correct/reduce engine speed", the applicant's attention is directed to the abstract, lines 6-10,

which describes how input torque to the transmission is maintained constant as a result of the clutch being tightened.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number (703) 308-2086.

Bridget Avery

Avery

May 1, 2002

Michael Mar

MICHAEL MAR 5-3-02
PRIMARY EXAMINER